

*Re-run*

IFWO

## RAW SEQUENCE LISTING

DATE: 08/16/2004

PATENT APPLICATION: US/10/724,209

TIME: 16:04:59

Input Set : N:\Crf4\Refhold\10\_folder\J724209.raw

Output Set: N:\CRF4\08162004\J724209.raw

1 <110> APPLICANT: ADLER, JON ELLIOT  
 2 <120> TITLE OF INVENTION: T2R TASTE RECEPTORS AND GENES ENCODING SAME  
 3 <130> FILE REFERENCE: 100337.54075US  
 4 <140> CURRENT APPLICATION NUMBER: US/10/724,209  
 5 <141> CURRENT FILING DATE: 2003-12-01  
 6 <150> PRIOR APPLICATION NUMBER: 60/195,532  
 7 <151> PRIOR FILING DATE: 2000-04-07  
 8 <150> PRIOR APPLICATION NUMBER: 60/247,014  
 9 <151> PRIOR FILING DATE: 2000-11-13  
 10 <160> NUMBER OF SEQ ID NOS: 31  
 11 <170> SOFTWARE: PatentIn Ver. 2.1  
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 14 <211> LENGTH: 1002  
 15 <212> TYPE: DNA  
 16 <213> ORGANISM: Homo sapiens  
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 19 atttcagtc tggagtttg agtgggggtt ctgaccaatg ccttcgtttt cttggtgaat 120  
 20 ttttgggatg tagtgaagag gcaggcactg agcaacagt attgtgtgct gctgtgtctc 180  
 21 agcatcagcc ggcttttctt gcatggactg ctgttctga gtgctatcca gcttaccac 240  
 22 ttccagaagt tgagtgaacc actgaaccac agctaccaag ccatcatcat gctatggatg 300  
 23 attgcaaacc aagccaacct ctggcttgc gctgctca gctgcttta ctgctccaag 360  
 24 ctcatccgtt tctctcacac ctctctgatc tgcctggcaa gctgggtctc caggaagatc 420  
 25 tcccagatgc tctgggtat tattctttgc tctgcatct gcaactgtct ctgtgtttg 480  
 26 tgctttttta gcagacctca ctccacagtc acaactgtgc tattcatgaa taacaataca 540  
 27 aggtccaact ggcagattaa agatctcaat ttattttatt cctttctctt ctgctatctg 600  
 28 tggctgtgct ctcttttct attgtttctg gtttctctg ggatgctgac tgtctccctg 660  
 29 ggaaggcaca tgaggacaat gaaggcttat accagaaact ctgctgaccc cagcctggag 720  
 30 gccacatta aagccctcaa gtctcttgc tctttttct gcttctttgt gatatcatcc 780  
 31 tgtgttgctt tcatctctgt gccctactg attctgtggc gcgacaaaat aggggtgatg 840  
 32 gtttgtgttg ggataatggc agcttgctcc tctgggcatg cagccatctt gatctcaggc 900  
 33 aatgccaaagt tgaggagagc tgtgatgacc attctgctct gggctcagag cagcctgaag 960  
 34 gtaagagccg accacaaggc agattcccg acactgtgct ga 1002  
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 37 <211> LENGTH: 333  
 38 <212> TYPE: PRT  
 39 <213> ORGANISM: Homo sapiens  
 40 <400> SEQUENCE: 2  
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 43 Thr Phe Leu Phe Ile Ser Val Leu Glu Phe Ala Val Gly Phe Leu Thr  
 44 20 25 30  
 45 Asn Ala Phe Val Phe Leu Val Asn Phe Trp Asp Val Val Lys Arg Gln



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46          35          40          45
47 Ala Leu Ser Asn Ser Asp Cys Val Leu Leu Cys Leu Ser Ile Ser Arg
48          50          55          60
49 Leu Phe Leu His Gly Leu Leu Phe Leu Ser Ala Ile Gln Leu Thr His
50          65          70          75          80
51 Phe Gln Lys Leu Ser Glu Pro Leu Asn His Ser Tyr Gln Ala Ile Ile
52          85          90          95
53 Met Leu Trp Met Ile Ala Asn Gln Ala Asn Leu Trp Leu Ala Ala Cys
54          100          105          110
55 Leu Ser Leu Leu Tyr Cys Ser Lys Leu Ile Arg Phe Ser His Thr Phe
56          115          120          125
57 Leu Ile Cys Leu Ala Ser Trp Val Ser Arg Lys Ile Ser Gln Met Leu
58          130          135          140
59 Leu Gly Ile Ile Leu Cys Ser Cys Ile Cys Thr Val Leu Cys Val Trp
60          145          150          155          160
61 Cys Phe Phe Ser Arg Pro His Phe Thr Val Thr Thr Val Leu Phe Met
62          165          170          175
63 Asn Asn Asn Thr Arg Leu Asn Trp Gln Ile Lys Asp Leu Asn Leu Phe
64          180          185          190
65 Tyr Ser Phe Leu Phe Cys Tyr Leu Trp Ser Val Pro Pro Phe Leu Leu
66          195          200          205
67 Phe Leu Val Ser Ser Gly Met Leu Thr Val Ser Leu Gly Arg His Met
68          210          215          220
69 Arg Thr Met Lys Val Tyr Thr Arg Asn Ser Arg Asp Pro Ser Leu Glu
70          225          230          235          240
71 Ala His Ile Lys Ala Leu Lys Ser Leu Val Ser Phe Phe Cys Phe Phe
72          245          250          255
73 Val Ile Ser Ser Cys Val Ala Phe Ile Ser Val Pro Leu Leu Ile Leu
74          260          265          270
75 Trp Arg Asp Lys Ile Gly Val Met Val Cys Val Gly Ile Met Ala Ala
76          275          280          285
77 Cys Pro Ser Gly His Ala Ala Ile Leu Ile Ser Gly Asn Ala Lys Leu
78          290          295          300
79 Arg Arg Ala Val Met Thr Ile Leu Leu Trp Ala Gln Ser Ser Leu Lys
80          305          310          315          320
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82          325          330

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84 &lt;210&gt; SEQ ID NO: 3

85 &lt;211&gt; LENGTH: 966

86 &lt;212&gt; TYPE: DNA

87 &lt;213&gt; ORGANISM: Homo sapiens

88 &lt;400&gt; SEQUENCE: 3

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91 atacatgcag ctgaatgggt tcaaaataag gcagtttcca caagtggcag gatcctgggt 180
92 ttcctgagtg tatccagaat agctctccaa agcctcatga tgtagaaat taccatcagc 240
93 tcaacctccc taagttttta ttctgaagac gctgtatatt atgcattcaa aataagtttt 300
94 atattcttaa attttttagt cctgtgggtt gctgcctggc tcagtttctt ctactttgtg 360
95 aagattgcc aattctccta ccccttttct ctcaaactga ggtggagaat tactggattg 420

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96  ataccctggc ttctgtggct gtccgtgttt atttccttca gtcacagcat gttctgcac 480
97  aacatctgca ctgtgtattg taacaattct ttcctatcc actcctccaa ctccactaag 540
98  aaaacatact tgtctgagat caatgtggc ggctggctt tttctttaa cctggggatt 600
99  gtgactcctc tgatcatgtt catcctgaca gccaccctgc tgatcctctc tctcaagaga 660
100 cacaccctac acatgggaag caatgccaca gggccaacg accccagcat ggaggctcac 720
101 atgggggcca tcaaagctat cagctacttt ctcatctct acattttcaa tgcagttgct 780
102 ctgtttatct acctgtccaa catgtttgac atcaacagtc tgtggaataa tttgtgccag 840
103 atcatcatgg ctgcctaccc tgccagccac tcaattctac tgattcaaga taaccctggg 900
104 ctgagaagag cctggaagcg gcttcagctt cgacttcac tttacccaaa agagtggact 960
105 ctgtga 966

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107 &lt;210&gt; SEQ ID NO: 4

108 &lt;211&gt; LENGTH: 321

109 &lt;212&gt; TYPE: PRT

110 &lt;213&gt; ORGANISM: Homo sapiens

111 &lt;400&gt; SEQUENCE: 4

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114 Ile Thr Leu Ile Leu Ala Val Leu Leu Ala Glu Tyr Leu Ile Gly Ile
115 20 25 30
116 Ile Ala Asn Gly Phe Ile Met Ala Ile His Ala Ala Glu Trp Val Gln
117 35 40 45
118 Asn Lys Ala Val Ser Thr Ser Gly Arg Ile Leu Val Phe Leu Ser Val
119 50 55 60
120 Ser Arg Ile Ala Leu Gln Ser Leu Met Met Leu Glu Ile Thr Ile Ser
121 65 70 75 80
122 Ser Thr Ser Leu Ser Phe Tyr Ser Glu Asp Ala Val Tyr Tyr Ala Phe
123 85 90 95
124 Lys Ile Ser Phe Ile Phe Leu Asn Phe Cys Ser Leu Trp Phe Ala Ala
125 100 105 110
126 Trp Leu Ser Phe Phe Tyr Phe Val Lys Ile Ala Asn Phe Ser Tyr Pro
127 115 120 125
128 Leu Phe Leu Lys Leu Arg Trp Arg Ile Thr Gly Leu Ile Pro Trp Leu
129 130 135 140
130 Leu Trp Leu Ser Val Phe Ile Ser Phe Ser His Ser Met Phe Cys Ile
131 145 150 155 160
132 Asn Ile Cys Thr Val Tyr Cys Asn Asn Ser Phe Pro Ile His Ser Ser
133 165 170 175
134 Asn Ser Thr Lys Lys Thr Tyr Leu Ser Glu Ile Asn Val Val Gly Leu
135 180 185 190
136 Ala Phe Phe Phe Asn Leu Gly Ile Val Thr Pro Leu Ile Met Phe Ile
137 195 200 205
138 Leu Thr Ala Thr Leu Leu Ile Leu Ser Leu Lys Arg His Thr Leu His
139 210 215 220
140 Met Gly Ser Asn Ala Thr Gly Ser Asn Asp Pro Ser Met Glu Ala His
141 225 230 235 240
142 Met Gly Ala Ile Lys Ala Ile Ser Tyr Phe Leu Ile Leu Tyr Ile Phe
143 245 250 255
144 Asn Ala Val Ala Leu Phe Ile Tyr Leu Ser Asn Met Phe Asp Ile Asn
145 260 265 270

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Input Set : N:\CrF4\Refhold\10\_folder\J724209.raw

Output Set: N:\CRF4\08162004\J724209.raw

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146      Ser Leu Trp Asn Asn Leu Cys Gln Ile Ile Met Ala Ala Tyr Pro Ala
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148      Ser His Ser Ile Leu Leu Ile Gln Asp Asn Pro Gly Leu Arg Arg Ala
149          290                      295                      300
150      Trp Lys Arg Leu Gln Leu Arg Leu His Leu Tyr Pro Lys Glu Trp Thr
151          305                      310                      315                      320
152      Leu
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155 <211> LENGTH: 972
156 <212> TYPE: DNA
157 <213> ORGANISM: Homo sapiens
158 <400> SEQUENCE: 5
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160      actttgggtg tctccggaat agagtgcac actggcatcc ttgggagtgg ctccatcacg 120
161      gccatctatg gggctgagtg ggccaggggc aaaacactcc ccaactggtga ccgcattatg 180
162      ttgatgctga gcttttccag gctcttgcta cagatttggg tgatgctgga gaacattttc 240
163      agtctgctat tccgaattgt ttataaccaa aactcagtgt atatcctctt caaagtcac 300
164      actgtctttc tgaaccattc caatctctgg ttgctgcct ggctcaaagt ctctattgt 360
165      cttagaattg caaacttcaa tcatccttg ttcttctga tgaagaggaa aatcatagt 420
166      ctgatgcctt ggcttctcag gctgtcagt ttggtttct taagcttcag ctttctctc 480
167      tcgagagatg tcttcaatgt gtatgtgaat agctccattc ctatccctc ctccaactc 540
168      acggagaaga agtacttctc tgagaccaat atgggtcaacc tggtatttt ctataacatg 600
169      gggatcttcg ttctctgat catgttcac ctggcagcca cctgctgat cctctctctc 660
170      aagagacaca cctacacat gggaagcaat gccacagggt ccagggaccc cagcatgaag 720
171      gctcacatag gggccatcaa agccaccag tactttctca tcctctacat tttcaatgca 780
172      attgctctat ttctttccac gtccaacatc ttgacactt acagtctctg gaatattttg 840
173      tgcaagatca tcatggctgc ctaccctgcc ggccactcag tacaactgat cttgggcaac 900
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179 <212> TYPE: PRT
180 <213> ORGANISM: Homo sapiens
181 <400> SEQUENCE: 6
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184      Lys Val Thr Phe Thr Leu Val Val Ser Gly Ile Glu Cys Ile Thr Gly
185          20          25          30
186      Ile Leu Gly Ser Gly Phe Ile Thr Ala Ile Tyr Gly Ala Glu Trp Ala
187          35          40          45
188      Arg Gly Lys Thr Leu Pro Thr Gly Asp Arg Ile Met Leu Met Leu Ser
189          50          55          60
190      Phe Ser Arg Leu Leu Leu Gln Ile Trp Met Met Leu Glu Asn Ile Phe
191          65          70          75          80
192      Ser Leu Leu Phe Arg Ile Val Tyr Asn Gln Asn Ser Val Tyr Ile Leu
193          85          90          95
194      Phe Lys Val Ile Thr Val Phe Leu Asn His Ser Asn Leu Trp Phe Ala
195          100         105         110
196      Ala Trp Leu Lys Val Phe Tyr Cys Leu Arg Ile Ala Asn Phe Asn His

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TIME: 16:04:59

Input Set : N:\Crf4\Refhold\10\_folder\J724209.raw

Output Set: N:\CRF4\08162004\J724209.raw

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197          115          120          125
198    Pro Leu Phe Phe Leu Met Lys Arg Lys Ile Ile Val Leu Met Pro Trp
199          130          135          140
200    Leu Leu Arg Leu Ser Val Leu Val Ser Leu Ser Phe Ser Phe Pro Leu
201          145          150          155          160
202    Ser Arg Asp Val Phe Asn Val Tyr Val Asn Ser Ser Ile Pro Ile Pro
203          165          170          175
204    Ser Ser Asn Ser Thr Glu Lys Lys Tyr Phe Ser Glu Thr Asn Met Val
205          180          185          190
206    Asn Leu Val Phe Phe Tyr Asn Met Gly Ile Phe Val Pro Leu Ile Met
207          195          200          205
208    Phe Ile Leu Ala Ala Thr Leu Leu Ile Leu Ser Leu Lys Arg His Thr
209          210          215          220
210    Leu His Met Gly Ser Asn Ala Thr Gly Ser Arg Asp Pro Ser Met Lys
211          225          230          235          240
212    Ala His Ile Gly Ala Ile Lys Ala Thr Ser Tyr Phe Leu Ile Leu Tyr
213          245          250          255
214    Ile Phe Asn Ala Ile Ala Leu Phe Leu Ser Thr Ser Asn Ile Phe Asp
215          260          265          270
216    Thr Tyr Ser Ser Trp Asn Ile Leu Cys Lys Ile Ile Met Ala Ala Tyr
217          275          280          285
218    Pro Ala Gly His Ser Val Gln Leu Ile Leu Gly Asn Pro Gly Leu Arg
219          290          295          300
220    Arg Ala Trp Lys Arg Phe Gln His Gln Val Pro Leu Tyr Leu Lys Gly
221          305          310          315          320
222    Gln Thr Leu
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226 <212> TYPE: DNA
227 <213> ORGANISM: Homo sapiens
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231    atctcctttg ctgaccaaat tctcactgct ctggcggtct ccagagttgg ttgtctctgg 180
232    gtattattat taaactggta ttcaactgtg ttgaatccag cttttaatag tgtagaagta 240
233    agaactactg cttataatat ctgggcagtg atcaaccatt tcagcaactg gcttgctact 300
234    accctcagca tattttatgt gctcaagatt gccaatctct ccaactttat ttttcttcac 360
235    ttaaagagga gagttaagag tgtcattctg gtgatgttgt tggggccttt gctatttttg 420
236    gcttgctatc tttttgtgat aaacatgaat gagattgtgc ggacaaaaga atttgaagga 480
237    aacatgactt ggaagatcaa attgaagagt gcaatgtact tttcaaatat gactgtaacc 540
238    atggtagcaa acttagtacc ctccactctg accctactat cttttatgct gttaatctgt 600
239    tctttgtgta aacatctcaa gaagatgcag ctccatggta aaggatctca agatcccagc 660
240    accaaggctc acataaaagc tttgcaaact gtgatctcct tcctcttggt atgtgccatt 720
241    tactttctgt ccataatgat atcagtttgg agttttggaa gtctggaaaa caaacctgtc 780
242    ttcattgtct gcaaagctat tagattcagc tacccttcaa tccaccatt catcctgatt 840
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244    gtgaaaggag agaagacttc atctccatag
246 <210> SEQ ID NO: 8
247 <211> LENGTH: 309

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RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 08/16/2004  
PATENT APPLICATION: US/10/724,209      TIME: 16:05:00

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Output Set: N:\CRF4\08162004\J724209.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:25; Xaa Pos. 2,3,4,6,7,10,13,18

Seq#:26; Xaa Pos. 1,2,3,5,6,13

Seq#:27; Xaa Pos. 3,4,5,7,8,10,12,13

Seq#:28; Xaa Pos. 3,8,11,12,13,16

Seq#:29; Xaa Pos. 4,8,10,11,12,13,14

Seq#:30; Xaa Pos. 3,4,7,8,10,13,14

**VERIFICATION SUMMARY**

DATE: 08/16/2004

PATENT APPLICATION: US/10/724,209

TIME: 16:05:00

Input Set : N:\Crf4\Refhold\10\_folder\J724209.raw

Output Set: N:\CRF4\08162004\J724209.raw

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.341 Repeated in SeqNo=25  
.880 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0  
.923 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0  
.958 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0  
.998 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0  
.1037 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0